The Suez Canal

THE decision to make a new and very good station for the R.A.F. on the banks of the Suez Canal is a normal and natural development. Egypt is, like Iraq, a country which has been under some sort of British protection, but has now received full independence, and has entered into a treaty with Britain. In Iraq the air squadrons are being withdrawn from the Tigris to Dhibban on the Euphrates, where an air station of the most modern description is nearing completion.

The treaty with Egypt provides that the Royal Air Force in that country shall be congregated on the Suez Canal, and may be increased in numbers. In both cases the *amour propre* of the people of the country is soothed by the disappearance of British units and British uniforms from the neighbourhood of the capital.

While, on the one hand, a station on the Suez Canal will be out of sight of the people of Cairo, on the other hand the defence of the Canal is a matter of first-class concern to Britain. Everybody knows that. It is also of great importance to Egypt that the Canal shall be kept open and safe. During the Italian invasion of Abyssinia the Egyptians were no little alarmed, and realised the importance of having a powerful friend and ally to look after their interests in that direction.

Abyssinia and Eritrea do not march with Egypt, but they are on the borders of the Anglo-Egyptian Sudan, to the interests of which Egypt cannot be indifferent. The Italian conquest of Abyssinia has decidedly complicated the international position of Egypt, and therefore she is all the more willing that the Royal Air Force should have the Canal in its keeping.

Shipping and Air Transport

SHIPPING companies in the United States are, it appears, beginning to protest against what they call the monopoly of Pan-American Airways in running air services across the oceans. One shipping firm has addressed a letter to all members of Congress stating that it is in a position to undertake the operation of large flying boats and is prepared to spend five million dollars on them. Bills have since been introduced into both houses of Congress in order to make such an action legally possible, though it must not be forgotten that P.A.A. are already in very close co-operation with the South American Grace Line—hence Pan-American-Grace Airways, or Panagra as they are more normally known. In this country the shipping interests have always watched air transport development, and, in one or two cases, have actually been connected with serious projects.

The situation has features in common with the state of affairs which brought about the formation of Railway Air Services in this country. The older forms of transport have been impressed by the progress of air travel, and now wish to use it in conjunction with either ground or sea transport. Likewise they do not wish to have aircraft as a rival to their steamers or trains, as the case may be. This new attitude is a compliment at least to the prospective success of the air transport companies, but it may create a new difficulty. In the early days of air travel its directors would have been very glad to have had the resources of established ground or sea concerns behind them; but, when they are making good by their own efforts, they naturally do not relish the idea of giving up the possible harvest.

Airship Precedent

PAN-AMERICAN have done splendid work in establishing air lines from the United States to South America and across the Pacific, but it still remains a question whether transport in general, including air transport, could not be better used for the benefit of the travelling public if some system of co-operation were to prevail.

Years ago, when annual air conferences were held in the Guildhall, Sir Alan Anderson once made a remark to the effect that if airships could only do half what was claimed for them, the Orient line at least would be willing to back them. He pointed out, if we remember rightly, that he personally had not been able to spare the time to visit Australia for a number of years. If airships could get him there and back in a short time he would not care what fare was charged.

The goodwill then promised to airships might be extended to large flying boats, which are now making voyages which did not seem possible at the time of the Guildhall conference. Imperial Airways, however, do not now need the financial backing of steamship companies, as the Governments of the Empire have adopted them as their chosen agents.

Rivalry or Co-operation

AS for rivalry, we may also quote the expressed opinion of the late Sir Alfred Jarrow, who said that if airships made good the shipping lines would benefit because all the passengers in a hurry would go by air, and therefore the shipping companies would save very large sums by building only slower ships.

Things might not work out like that in practice, and there is a long way to go before even half the travellers who now use the *Queen Mary* and the *Normandie* will prefer or be able to cross the Atlantic in a flying boat. It is also pertinent to observe that the millionaire in a hurry is not a sound source of regular profit for any air line, and that, therefore, the question of keeping fares low is still of importance.

Co-operation between air transport and surface transport will probably be for the good of both, but that is not to say that the best arrangement will be for the shipping firms to own and run the air lines—unless, of course, the Government wearies of paying air subsidies and prefers to let the shippers carry the baby. There is still the prospect that one day air lines may pay their way without subsidies.

A Mountain Test Plant?

MUCH of the work of developing the modern aero engine has been done in the firms' test houses, first on single-cylinder units and afterwards on complete engines. The need for high flying and supercharged engines brought fresh problems, and at the Royal Aircraft Establishment at Farnborough there is a plant for operating engines under conditions intended to simulate those met at heights. In the main this plant has done what was needed, but there are features which cannot be imitated completely.

A short time ago France decided to try the experiment of testing aero engines at actual instead of at imitation altitudes. She established an engine-test plant at Mount Lachat, in the Mont Blanc *massif*. The test plant is operated by the Société Nationale de Construction de Moteurs and is situated at a height of approximately 7,000ft. Mount Lachat was chosen not so much because of its altitude as on account of the intense cold frequently experienced in that district. The actual test bed is mounted on a carriage which runs on rails to the edge of a precipice, and prolonged tests in temperatures below freezing point can be made in the open without causing inconvenience to anyone except the crew!

The drawbacks of the idea are obvious enough: Long distance between works and altitude-testing plant; testing crews having to "rough it"; supplies to be stored against emergency; and so forth; but the gains to be expected in the form of full knowledge of engine behaviour at operational height and in operational temperatures should be sufficient to make the experiment worth while. The idea seems to have a good deal to recommend it and might be worth adopting in this country. Though we have nothing higher than the 4,406ft. of Ben Nevis, that inhospitable mountain can at least offer the chilliness.

DIARY OF FORTHCOMING EVENTS—PAGE 35